# TECHNICAL REVIEW DOCUMENT For RENEWAL TO OPERATING PERMIT 020PWE247

Public Service Company – Yosemite Air Blend Plant Weld County Source ID 1230141

> Prepared by Jacqueline Joyce February and March 2008 Revised June 2008

# I. Purpose:

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed operating permit proposed for this site. The current Operating Permit was issued on September 1, 2003. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted August 20, 2007, additional information submitted on April 25 and June 5, 2008 comments on the draft permit and technical review document submitted on May 16, 2008, previous inspection reports and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <a href="http://www.cdphe.state.co.us/ap/Titlev.html">http://www.cdphe.state.co.us/ap/Titlev.html</a>. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

#### II. Description of Source

This facility consists of six gas-fired air compressors used for compressed air natural gas blending, under Standard Industrial Classification 4922. In addition, a portable incinerator operates at this facility.

The facility is located at 934 Weld County Road 19, Brighton, in Weld County. This facility is located in an area classified as attainment for all pollutants except ozone. It is

classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.16.

There are no affected states within 50 miles of the plant. The following Federal Class I designated area is within 100 kilometers of the plant: Rocky Mountain National Park.

The summary of emissions that was presented in the Technical Review Document (TRD) for the original permit issuance has been modified to update actual emissions.

Potential to Emit (PTE), in tons/yr							
Emission Unit	NO <sub>X</sub>	CO	VOC	HAP			
E001 – Waukesha, L5108GL, S/N 398630	10.4	18.4	7.0	2.3			
E002 – Waukesha, L5108GL, S/N 398631	10.4	18.4	7.0	2.3			
E003 – Waukesha, 7042GL, S/N C-10336-1	16.7	29.5	11.1	3.6			
E004 – Waukesha, 70412GL, S/N C-11373-1	16.7	29.5	11.1	3.6			
E005 – Caterpillar, G3608, S/N 4WF00199	34.3	57.1	11.4	7.4			
E006 - Caterpillar, G3612, S/N BKE00197	34.4	85.7	17.2	11.2			
P007 – Smart Ash Incinerator*	0.01	0.05	0.04				
Total	122.81	238.65	64.84	30.4			

<sup>\*</sup>Permitted emissions from the incinerator are well below the APEN de minimis level and therefore the emission limits are not included in the Title V permit. However, APENs and permits are required for all incinerators in accordance with Colorado Regulation No. 3, Part A, Section III.D.2 and Part B, Section II.D.6.

Potential to emit for the engines is based on permitted emission limits. In the above table, the breakdown of HAP emissions by individual HAPs is provided on page 14 of this document. As discussed in the table footnotes on this page, HAP emissions are based on the maximum hourly heat input rate or horsepower and 8760 hrs/yr of operation and the highest emission factor from either AP-42, Section 3.2 (4-cycle lean burn engines) or GRI HAPCalc version 3.01 (4-stroke clean or lean burn, field gas or natural gas).

Actual Emissions, in tons/yr							
Emission Unit	$NO_X$	CO	VOC	HAP			
E001 - Waukesha, L5108GL, S/N 398630	6.5	11.4	4.4	0.93			
E002 – Waukesha, L5108GL, S/N 398631	4.09	7.21	2.76	0.59			
E003 – Waukesha, 7042GL, S/N C-10336-1	12.73	22.42	22.42 8.58				
E004 – Waukesha, 70412GL, S/N C-11373-1	12.8	22.6	8.7	1.85			
E005 - Caterpillar, G3608, S/N 4WF00199	11.32	19.11	3.77	1.56			
E006 – Caterpillar, G3612, S/N BKE00197	9.73	4.86	24.02	2.02			
P007 – Smart Ash Incinerator*							
Total	57.17	87.6	52.23	8.79			

<sup>\*</sup>as indicated in the above table emissions from the incinerator are below APEN de minimis levels and therefore are not shown on this table.

Actual emissions are as reported on APENs submitted on April 21, 2006 (engines E001 and E004) based on 2005 data and March 16, 2005 (engines E002, E003, E005 and E006) based on 2004 data. Actual HAP emissions are based on HAPS above the APEN reportable level, which were acetaldehyde, acrolein and formaldehyde. Actual HAP emissions were estimated using AP-42 emission factors.

#### MACT Requirements

## Case-by-Case MACT - 112(j) (40 CFR Part 63 Subpart B §§ 63.50 thru 63.56)

Under the federal Clean Air Act (the Act), EPA is charged with promulgating maximum achievable control technology (MACT) standards for major sources of hazardous air pollutants (HAPs) in various source categories by certain dates. Section 112(j) of the Act requires that permitting authorities develop a case-by-case MACT for any major sources of HAPs in source categories for which EPA failed to promulgate a MACT standard by May 15, 2002. These provisions are commonly referred to as the "MACT hammer".

Owners or operators that could reasonably determine that they are a major source of HAPs which includes one or more stationary sources included in the source category or subcategory for which the EPA failed to promulgate a MACT standard by the section 112(j) deadline were required to submit a Part 1 application to revise the operating permit by May 15, 2002. The source submitted a notification indicating that the Yosemite Air Blend Plant was a major source for HAPS, with equipment under the reciprocating internal combustion engine (RICE) source category.

The Division included a condition in the original Title V permit to submit a 112(j) application by April 28, 2004. The EPA signed off on the final rules for all of the source categories which were not promulgated by the deadline; therefore, the case-by-case MACT provisions in 112(j) no longer apply and no 112(j) application was required.

# Reciprocating Internal Combustion Engine (RICE) MACT (40 CFR Part 63 Subpart ZZZZ)

The RICE MACT (40 CFR Part 63 Subpart ZZZZ) was signed as final on February 26, 2004 and was published in the Federal Register on June 15, 2004. Under those rules, an affected source under the RICE MACT is any existing, new or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower. All the engines included in Section II of the permit (engines E001 through E006) are affected sources under the RICE MACT. Existing (commenced construction prior to December 19, 2002) 2-cycle lean burn and 4-cycle lean burn RICE do not have to meet the requirements in Subparts A or ZZZZ, including the initial notification requirements as provided for in 40 CFR Part 63 Subpart ZZZZ § 63.6590(b)(3). Therefore, the engines addressed in Section II of the permit (engines E001 through E006) are not subject to the RICE MACT.

However, revisions were made to the RICE MACT (published in the federal register on January 18, 2008) to address engines ≤ 500 hp and engines at area sources. The two

emergency generators listed in the insignificant activity list would be affected sources under the revisions. Under these revisions, existing 4SRB, 2SLB, 4SLB and CI engines are exempt from the requirements. For purposes of the MACT, for engines ≤ 500 hp, existing means commenced construction or reconstruction before June 12, 2006. The two emergency generators commenced construction prior to June 12, 2006 and as a result the requirements in the RICE MACT do not apply.

# Industrial, Commercial and Institutional Boilers and Process Heaters MACT (40 CFR Part 63 Subpart DDDDD)

The final rule for industrial, commercial and institutional boilers and process heaters was signed on February 26, 2004 and was published in the Federal Register on September 13, 2004. There are process heaters (space heating boiler and hot water heater) included in the insignificant activity list in Appendix A of the permit. Based on the information in the renewal application, these units are used to provide space heat for office, shop and/or compressor building. The definition of process heater in 40 CFR Part 63 Subpart DDDDD § 63.7575, excludes units used for comfort heat or space heat. Therefore these units would not be subject to requirements of 40 CFR Part 63 Subpart DDDDD.

As of July 30, 2007, the Boiler MACT was vacated; therefore, the provisions in 40 CFR Part 63 Subpart DDDDD are no longer in effect and enforceable. The vacatur of the Boiler MACT triggers the case-by-case MACT requirements in 112(j), referred to as the MACT hammer, since EPA failed to promulgate requirements for the industrial, commercial and institutional boilers and process heaters by the deadline. Under the 112(j) requirements (codified in 40 CFR Part 63 Subpart B §§ 63.50 through 63.56) sources are required to submit a 112(j) application by the specified deadline. As of this date, EPA has not set a deadline for submittal of 112(j) applications to address the vacatur of the Boiler MACT. It is not clear whether 112(j) applications would be required for these small emission units, since they are excluded from the definition of process heater and are not affected facilities. Therefore, the Division has not included a requirement in the permit to submit a 112(j) application. If the Division considers that in the future, a 112(j) application will be required for these small units the source will be notified.

#### Compliance Assurance Monitoring (CAM) Requirements

CAM applies to any emission unit that is subject to an emission limitation, uses a control device to achieve compliance with that emission limitation and has potential pre-control emissions greater than major source levels. Although the engines at this facility are equipped with a control device, the control device is not necessary to comply with the annual emission limitations. Therefore, CAM does not apply to the emission units at this facility.

#### III. Discussion of Modifications Made

#### **Source Requested Modifications**

The source's requested modifications identified in the renewal application and additional information submittal were addressed as follows:

# Page following cover page

The Responsible Official has been changed as indicated in the additional information submitted on April 25, 2008.

#### **Insignificant Activities**

The source provided an updated list of insignificant activities. The updated list has been included in the renewal permit.

#### Section II, Condition 1.5

The source has indicated that the portable monitoring testing referred to in Condition 1.5 relate to testing requirements from a Consent Decree and that these testing requirements have been fulfilled. The Division agrees and has removed these requirements from the renewal permit.

#### Colorado Regulation No. 7, Section XVI.B.2 Requirements

The source has indicated that oxidation catalysts have been installed on the engines as required by Colorado Regulation No. 7, Section XVI.B.2 but that they are not taking credit for the control devices to reduce their potential to emit. The Division has included the appropriate requirements from Colorado Regulation No. 7, Section XVI.B.2 in the renewal permit.

#### **MACT** Requirements

The source has indicated that although the source is a major source for HAP emissions they are not subject to the MACT requirements. MACT requirements were discussed previously under Section II – Source Description, under "MACT Requirements".

#### **Other Modifications**

In addition to the source requested modifications, the Division has included changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

The Division has made the following revisions, based on recent internal permit processing decisions and EPA comments to the Yosemite Air Blend Plant Renewal Operating Permit. These changes are as follows:

#### Page Following Cover Page

• Monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).

#### <u>General</u>

• The Reg 3 citations were revised throughout the permit, as necessary, based on the recent revisions made to Reg 3.

#### Section I – General Activities and Summary

- Revised the description under Condition 1.1 to address the attainment status of the area in which the facility is located.
- Corrected the language in Condition 1.4 from "Section V Conditions" to "Section IV Conditions". In addition, revised the reference to Section IV, Condition 3.g to specify that only the last paragraph of the condition is state-only enforceable and to add 3.d to the list. Note that Section IV, Condition 3.d (affirmative defense provisions for excess emissions during malfunctions) is state-only until approved by EPA in the SIP.
- Corrected the reference to Section II Condition 1.17 in Condition 1.4. There is no Section II, Condition 1.17 in the permit. The state-only enforceable conditions in Section II are 7.3 and 7.7 and these have been listed in Condition 1.4 as state-only enforceable requirements.
- With the promulgation of federal NSPS and area source MACT requirements, as well as requirements in Colorado Regulation No. 7 for reciprocating internal combustion engines the Division has determined that it is no longer able to provide the source with an alternative operating scenario (AOS) for permanent engine replacement. Therefore, the Division has removed the AOS for permanent engine replacement and included the most recent version of the AOS for temporary engine replacement in the renewal permit.
- Made minor revisions to the language in Condition 3 (Prevention of Significant Deterioration (PSD)) to be more consistent with other permits. In addition, revised this condition to address the attainment status of the area in which the facility is located and added a condition to indicate whether there are any other operating permits associated with this facility in order to determine PSD and/or nonattainment new source review (NANSR) requirements.
- Added an explanation under Condition 5.1 (CAM) to note why CAM is not applicable.

- Removed Condition 6 (Maximum Achievable Control Technology). Since all the MACT requirements were finalized before the 112(j) deadline (April 28, 2004) this requirement no longer applies.
- Added a column to the Table in Condition 7.1 for the startup date of the equipment.

#### Sections II.1 thru 6 – Engines

- Based on EPA's response to a petition on another Title V operating permit, minor language changes were made to various permit conditions (both in the table and the text) to clarify that only natural gas is used as fuel for permit conditions that rely on fuel restriction for the compliance demonstration.
- Reformatted the permit to indicate more clearly that portable monitoring is required quarterly to monitor compliance with the emission limits.
- The 30% opacity requirement was removed from the permit. The specific activities under which the 30% opacity standard applies are: building a new fire, cleaning of fire boxes, soot blowing, startup, any process modification, or adjustment or occasional cleaning of control equipment. Based on engineering judgment the Division considers that building a new fire, cleaning of fire boxes and soot-blowing does not apply to the operation of internal combustion engines. Although these engines have control devices, they do not control PM emissions and therefore would not affect opacity emissions. Process modifications and startup may apply to engines, however, based on engineering judgment, the Division believes that such activities would be unlikely to occur for longer than six minutes. Therefore, the 30% opacity requirement has been removed form the permit.
- Included a separate condition in the table to indicate that the Btu content of the gas must be determined semi-annually. Although this is noted in the text it is not specifically listed in the table.
- Removed the HAP emission calculations and emission factors from the permit. Reporting of HAP emissions is required under the recordkeeping and reporting requirements in Section IV, General Condition 22.e (APEN reporting). However, it has not been the Division's practice to list HAP emission factors and require that HAP emissions be calculated in Section II of the permit, unless the emission unit is subject to a specific HAP limitation. Therefore, the HAP emission factor and the HAP emission calculations have been removed from Section II of the permit. It should be noted that the source is still required under Section IV, General Condition 22.e to report on an APEN, any HAP or other non-criteria reportable pollutant that exceeds the APEN de minimis level.
- The permit was revised to specify the source of the emission factor and to include the emission factors in the table, rather than in the text.
  - For informational purposes it should be noted that the following emission factors were used to set the permit limits in the original construction permits:

Unit	Emi	Engine Heat Rate		
	NO <sub>X</sub>	СО	VOC	(g/hp-hr)
E001, Waukesha L5108 GL	1.5	2.65	1	7,175
E002, Waukesha L5108GL	1.5	2.65	1	7,175
E003, Waukesha 7042GL	1.5	2.65	1	7,180
E004, Waukesha 7042GL	1.5	2.65	1	7,180
E005, Caterpillar G3608	1.5	2.5	0.5	6,760
E006, Caterpillar G 3612	1	2.5	0.5	6,953

All of the above emission factors are from the manufacturer. However, for the Caterpillar engines, the source used the manufacturer's emission factor of 0.7 g/hp-hr and applied a factor of 2.14 for the G3608 and a factor of 1.42 for the G3612.

The manufacturer's emission factors were converted to lbs/mmBtu using the following equation:

Lb/mmBtu = 
$$g/hp-hr \times 10^6$$
 Btu/mmBtu  
Heat rate (Btu/hp-hr) x 453.6 g/lb

Note that the Division reviewed the converted emission factors and found that the  $NO_X$  and CO for E005 were slightly lower than they should be, so the permit was revised to include the correct emission factors.

- The construction permit citations listed for the annual emission and fuel consumption limits for Section II.1 through 4, include the statement "revised in accordance with Section I, Condition 1.3". However, based on a review of the construction permits and the technical review document for the original Title V permit, it appears that no revisions were made to the underlying construction permits with respect to the annual emission and fuel consumption limits. Therefore, this statement has been removed.
- Revised the general operating requirement (formerly included in Condition 9) to address the oxidation catalyst and to include "good engineering practices" in addition to manufacturer's recommendations.
- Added the requirements from Colorado Regulation No. 7, Section XVI to the permit.

Typically, the Division has included monitoring requirements for engines with catalysts (i.e. monthly monitoring of catalyst inlet temperature and pressure drop across the catalyst). However, since the source is not taking credit for the catalysts in order to meet the permitted emission limitations or for APEN reporting purposes, the Division will not require monitoring for these engines.

#### Section II.7 – Smart-Ash Incinerator

In their May 16, 2008 comments on the draft permit, the source indicated that the smart ash incinerator was now permanently located at Yosemite Blend. The source submitted a request to cancel the portable id number and construction permit on June 5, 2008.

Therefore, references to the portable source id (listed in the table in Section I, Condition 7.1) and construction permit (listed in the table in Section I, Condition 7.1 and cited in various placed in Section II.7) have been removed. The appropriate applicable requirements from the portable construction permit (96WE424P) for the smart ash incinerator are included in the Title V permit as a combined construction/operating permit as provided for in Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7.

Re-formatting of the requirements in this section has been done to make the permit more consistent with the requirements for the same type of unit in PSCo's Roundup Title V permit. In general, significant changes have not been made, except for the following:

- The emission limits that were included in the construction permit were not included in the Title V permit because the emission limits were below the APEN de minimis levels. However, the Division considers that emission should be calculated annually for purposes of determining whether a revised APEN should be filed; therefore, a condition has been added to require this.
- The current permit requires that the source record the daily charging rates and to keep monthly records of the types of fuels burned and/or used as startup fuel. The permit will be revised to require that the source record the weight of waste burned in each charge and to record descriptive information on the materials included in each charge in order to monitor compliance with the requirements on the quantity and types of waste burned.
- In addition, in the current permit the charge rate is specified as 50 lbs/hr "or" 5 tons/yr, which is consistent with the language in the construction permit. The Division considers that the "or" should be an "and" and has corrected this in the renewal permit.
- Added a requirement in the table to record hours of operation. Hours of operation
  must be recorded in accordance with the text in Condition 7.1.2 and the Division
  considers that adding this requirement to the table will more clearly indicated that
  hours of operation must be recorded. In addition, hours of operation shall be used to
  demonstrate compliance with the hourly charge limitation.
- In addition, Condition 7.4 specifies that "all materials to be incinerated must have a
  flash point higher than 100 ° F. The term flash point is generally used for liquids;
  therefore, this condition will be changed to reflect that no wastes contaminated by
  liquids with a flash point lower than 100 ° F shall be burned in the incinerator.
- The current permit includes both the Reg 1 20% opacity and 30% opacity requirements. The 30% opacity requirement applies during the following specific conditions: fire building, cleaning of fire boxes, soot blowing, start-up, process modifications, or adjustment or occasional cleaning of control equipment. Based on engineering judgment the Division believes that none of these special conditions apply to this unit. Fire building, soot blowing and cleaning of fire boxes is most aptly applied to units such as boilers and not this simple unit. This unit has no control

equipment. This unit consists of placing a lid on a 55 gallon drum. The lid contains a blower unit that blows air around the top of the drum cyclonically which creates a virtual afterburner at the top of the drum. Operation of this unit consists of loading the drum with waste, lighting the waste, placing the lid on the drum and turning on the blowers. With this operation there is no real startup or a possibility for process modification. Therefore, the Division considers that the 30% opacity requirement does not apply to this unit and as a result it has been removed from the permit.

- In the current permit, compliance with the opacity requirement for the incinerator is
  presumed when operation and maintenance of the unit is performed in accordance
  with manufacturer's recommendations. However, for this same unit at PSCo –
  Roundup, a visible emission observation is required for each burn event. Therefore,
  the permit will be revised to require the same monitoring required for the PSCo
  Roundup unit.
- The construction permit included the Reg 6, Part B, Section VII requirements for incinerators but did not include the Reg 1 requirements for incinerators (particulate matter emissions not to exceed 0.15 grains per standard cubic foot, dry corrected to 12% CO<sub>2</sub>). The Reg 1 particulate matter requirements apply at all times. The Reg 6, Part B particulate matter requirement does not apply during periods of startup, shutdown and malfunction, since Reg 6, Part B, Section I.A incorporates the federal NSPS general provisions (40 CFR Part 60 Subpart A). Based on EPA determinations, the Division has interpreted that 40 CFR Part 60 Subpart A ' 60.11(d) as exempting sources from the emission standard during startup, shutdown and malfunction. Although the Division has previously indicated that we do not believe that there are any startup, shutdown or malfunctions applicable to this simple unit, which would then make the Reg 6, Part B state-only standard applicable at all times and therefore make the Reg 6, Part B requirement more stringent than the Reg 1 particulate standard the Division will not streamline out the Reg 1 standard. The Reg 1 standard is not being streamlined out of the permit because the Division is unable to streamline out a state and federally enforceable requirement out of the Operating Permit in favor of a more stringent **state-only** requirement. Therefore, the renewal permit will include the Reg 1 particulate matter requirement.
- This unit is subject to a Reg 1 20% opacity requirement and a Reg 6, Part B, state-only opacity requirement. The Reg 1 20 % opacity requirement applies at all times, since the Division has previously indicated that the special conditions in the Reg 1 30% opacity requirements do not apply to this simple unit. Reg 6, Part B, Section I.A adopts the federal NSPS general provisions (40 CFR Part 60 Subpart A). The Reg 6, Part B state-only opacity requirement is not applicable during start-up, shutdown and malfunction in accordance with 40 CFR Part 60 Subpart A ' 60.11(c). The Division has previously indicated that we do not believe that there are any startup, shutdown or malfunctions applicable to this simple unit, which would then make the Reg 6, Part B state-only standard applicable at all times. The Reg 6, Part B state-only opacity standard will be streamlined out of the permit since the Reg 1 opacity standard is as stringent.

Section II.8 – Opacity

• This section II.8 was removed. The opacity monitoring requirements are specifically addressed under the individual permit conditions.

#### <u>Section II.9 – Portable Monitoring</u>

- The portable monitoring requirements were replaced with the most recent version.
- In addition, the provisions for operating and maintaining the engines in accordance with manufacturer's recommendations was moved and are listed under the individual permit conditions.

# <u>Section II.10 – Insignificant Activities</u>

• This condition was revised to require the source to conduct an analysis of the potential to emit (PTE) of CO from insignificant activities and sum the CO PTE from insignificant activities with the CO PTE from the significant emission units to determine the facility wide CO PTE. The permit requires that this analysis be updated if any new insignificant activities that are potential sources of CO emissions are added to the facility. In the event that additional insignificant activities put the facility wide CO emissions above the major stationary source level, the permit requires that the source submit an application to revise the permit to indicate that the facility is a major stationary source for purposes of PSD review requirements.

# Ozone Early Action Compact Requirements (Reg 7)

The Division entered into an early action compact to delay being re-designated as a non-attainment area for the 8-hour ozone standard. The early action compact requires controls to reduce VOC emissions in the 8-hour ozone control area. The early action compact VOC control requirements have been included in Colorado Regulation No. 7 and those requirements became effective, on a state-only basis, on May 31, 2004 and on a state and federal basis effective on September 19, 2005 (EPA approval published in the August 19, 2005 federal register). Although the 8-hour ozone control area has since been re-designated as a non-attainment area, the provisions for the 8-hour ozone control area still apply. The VOC control requirements apply to oil and gas operations (Colorado Regulation No. 7, Section XII) and stationary internal combustion engines (Colorado Regulation No. 7, Section XVI) located in the 8-hour ozone control area.

Under the oil and gas operation requirements, the following requirements could apply:

 Requirements for condensate collection, storing and handling (Colorado Regulation No. 7, Section XII.A), as follows:

These requirements apply to exploration and production operations, compressor stations or drip stations than collect store and handle condensate <u>and</u> are located upstream of a natural gas-processing plant. The Yosemite Blend facility injects air into pipeline quality natural gas (i.e. gas that has been processed) to lower the Btu content and then transmits the lower Btu gas to end users. There are no

- condensate tanks at this facility and this facility is located downstream of a natural gas processing plant; therefore, these provisions do not apply to this facility.
- Requirements for gas-processing plants (Colorado Regulation No. 7, Section XII.B).
  - The Yosemite Blend facility is not a natural gas processing plant. There is no equipment at the facility that is used to extract natural gas liquids. Therefore, these provisions do not apply to the Yosemite Blend facility.
- Requirements for glycol dehydrator (Colorado Regulation No. 7, Section XII.C).
  - There are no glycol dehydrators at the Yosemite Blend facility; therefore, these requirements do not apply.
- Definitions and General Provisions (Colorado Regulation No. 7, Section XII.D)
  - Since none of the provisions in Colorado Regulation No. 7, Section XII apply, the definitions and general provisions do not apply to the Yosemite Blend facility.

As indicated in the renewal application, the engines are subject to the requirements in Section XVI and the appropriate requirements for internal combustion engines have been included in the permit.

Note that although Reg 7 was revised in December 2006, those revisions did not affect the requirements for engines in Section XVI. Therefore, the state and federal enforceability of the Reg 7 requirements has not changed.

#### <u>Section III – Permit Shield</u>

- The citation for the permit shield has been revised to make corrections (Part C, Section XIII, should be XIII.B), to reflect revisions and restructuring of Reg 3 and to remove Reg 3, Part C, Section V.C.1.b and C.R.S. § 25-7-111(2)(I) since they don't address the permit shield.
- Since Reg 3 has been revised, the citation for the PSD regulations was revised in Section 1 of the permit shield.
- Removed the language regarding the VOC content of the gas from the "justification" column for the NSPS Subpart KKK requirements in Section 1. The facility is not subject to NSPS Subpart KKK because the facility is not a natural gas processing plant.
- Added a section 3 for streamlined conditions. As discussed for the smart-ash incinerator, the Division included the Reg 6, Part B, Section VII.C.2 20% opacity requirement and the requirement from the construction permit to retain records for two years were included as streamlined conditions.

# Section IV - General Conditions

- Revisions were made to the Common Provisions Regulation (general condition 3), effective September 30, 2002. The appropriate revisions were made to the language in the permit.
- The upset requirements in the Common Provisions Regulation (general condition 3.d) were revised December 15, 2006 (effective March 7, 2007) and the revisions were included in the permit. Note that these provisions are state-only enforceable until approved by EPA into Colorado's state implementation plan (SIP).
- Removed the "state-only requirement" statement after general condition 3.d
  (affirmative defense provisions for excess emissions during startup and shutdown).
   The EPA has approved the affirmative defense provisions, with one exception and the exception, which is state-only enforceable is identified in Section I, Condition 1.4.
- Added an "and" between the Reg 3 and C.R.S. citations in General Condition 4 (compliance requirements).
- Replaced the reference to "upset" in Condition 5 (emergency provisions) and 21 (prompt deviation reporting) with "malfunction".
- General Condition No. 21 (prompt deviation reporting) was revised to include the definition of prompt in 40 CFR Part 71.
- Replaced the phrase "enhanced monitoring" with "compliance assurance monitoring" in General Condition No. 22.d.

#### Appendices

- The language under facility plot plan in Appendix A was revised to reflect that the facility is shown on three (3) different plot plans.
- Appendix B and C were replaced with latest version.
- Changed the mailing address for EPA in Appendix D.

# **Maximum HAP Emissions from Engines (based on Published Emission Factors)**

Unit	HAP Emissions ( acetaldehyde	(tons/yr) Acrolein	benezene	toluene	ethylbenzene	Xylene	formaldehyde	n-hexane	2,2,4- trimethylpentane	methanol	total
E001	1.92E-01	1.23E-01	9.96E-02	1.87E-01		6.26E-02	1.49E-00	2.51E-02		8.95E-02	2.27
E002	1.92E-01	1.23E-01	9.96E-02	1.87E-01		6.26E-02	1.49E-00	2.51E-02		8.95E-02	2.27
E003	3.06E-01	1.96E-01	1.58E-01	2.98E-01		9.98E-02	2.38E-00	3.99E-02		1.43E-01	3.62
E004	3.06E-01	1.96E-01	1.58E-01	2.98E-01		9.98E-02	2.38E-00	3.99E-02		1.43E-01	3.62
E005	6.31E-01	4.05E-01	3.09E-01	6.15E-01		2.06E-01	4.92E-00	7.78E-02		2.94E-01	7.45
E006	9.46E-01	6.07E-01	4.76E-01	9.22E-01		3.09E-01	7.37E-00	1.20E-01		4.41E-01	11.19
Total	2.57	1.65	1.30	2.51	0.00	0.84	20.04	0.33	0.00	1.20	30.44

Engine emissions are based on most conservative emission factor from either AP-42 (4SLB), or GRI HAPCalc V 3.01 (4SLB or 4SCB) for each pollutant.